

**REMARKS**

The Examiner's communication of December 11, 2008 has been carefully considered. Applicants respectfully request that prosecution be reopened under 37 CFR §41.39(b)(1), and reconsideration of this application, as amended, is respectfully requested.

It is respectfully noted that claims 25-30 have been canceled without prejudice or disclaimer to the subject matter set forth therein. Independent claims 1, 3 and 5 have been amended in response to the new grounds for rejection under 35 USC §101, and are believed to meet the requirements thereof as described in detail below. New claims 31-36 have been added.

*Summary of Rejections*

Turning now to the Examiner's Answer, claims 1-15, 19, 22-24 and 28 remain rejected under 35 USC §103(a) as being unpatentable over US 5,437,278 to Wilk (Wilk) in view of US 4,945,476 to Bodick et al. (Bodick). Claims 16 - 18 and 20 - 21 remain rejected under 35 USC §103(a) as being unpatentable over Wilk in view of Bodick and further in view of US Application 2003/0036683A1 to Kehr et al. (Kehr); and further in view of either US Provisional Application 60/200853 to Kehr et al. (Kehr Prov. A) or US Provisional Application 60/214688 to Kehr et al. (Kehr Prov. B) as specifically set forth in the Examiner's Answer (Examiner's Answer Dec. 2008; p. 19). Lastly, claims 1-24 and 28 were newly rejected under 35 USC §101 as being directed to non-statutory subject matter pursuant to *In re Bilski*, 88 USPQ2n 1385 (Fed. Cir. 2008).

*35 USC §103(a) Rejections Traversed*

The disclosures of Wilk and Bodick and the distinctions between the amended independent claims may be briefly summarized as follows:

Considering **claims 1-15, 19, 22-24**, rejected under 35 USC §103(a) as being unpatentable over Wilk in view of Bodick, Applicants further incorporate herein arguments previously submitted on appeal relative to the failure of Wilk and Bodick and the impropriety of combining the two. While Wilk and Bodick are both directed to automated medical diagnosis, Applicants respectfully urge that the two patents are not properly combined. As the basis for the rejection, the Final Office Action alleged

that "it would have been obvious to one of ordinary skill in the art at the time of Appellant's invention to modify the system of Wilk and incorporate the ability to identify a subset of possible diagnoses based on a sample of characteristics and further to display the images or other data related to the subset of diagnoses as taught by Bodick et al." Applicants respectfully urge that Wilk teaches away from such a modification. What motivation would there be to display Bodick's images to a patient that has been diagnosed by the Wilk system, particularly when Wilk indicates that the computer conducts an image comparison (col. 2, lines 46-56)?

Applicants respectfully contend that the inherent ambiguity of medical diagnosis requires, not automated diagnosis, but a knowledge presentation facilitating rapid comparison and perception by the user - an essential distinction set forth in the rejected claims of the present application. The design of the claimed system and method, as set forth in the amended claims combines a medical knowledge base with visual representations of possible diagnoses based upon findings-diagnosis links, which are further used to present images representing a plurality of diagnoses to visually compare what the system user sees displayed relative to the possible diagnoses in relation to a patient. Such a system or method is not believed to be described in Wilk or Bodick, either alone or in combination.

Bodick also fails to teach the limitations of the independent claims not taught by Wilk. Bodick discloses the creation of a knowledge base containing both pictorial images and textual information therein (col. 2, lines 39-40), along with a system to use such information in a medical diagnosis. The system is further described as being dynamic; to permit the addition of newly discovered characteristics observed in patients and deletion of characteristics having little diagnostic importance.

Although Bodick does describe alternative methods of accessing the knowledge base (by cases having specific features or by cases in which a particular disease was diagnosed; col. 5, lines 42-48), Applicants respectfully submit that such a teaching does not give rise to the recited limitations of findings-diagnosis links within the knowledgebase, or automatically identify[ing], using the findings-diagnosis links, a subset including a plurality of diagnoses consistent with the descriptive characteristics. And, as noted on appeal, neither Wilk nor Bodick teach the automated identification of a subset having a plurality of possible diagnoses, in response to characteristics or the concurrent display of the plurality of images relating to the plurality of possible diagnoses. Applicants respectfully urge that the

Examiner's contention that Bodick "seems to suggest" such limitations (Examiner's Answer, p. 17) does not meet the requirement of *prima facie* obviousness, where the reference teaches the limitation. Hence, amended independent claims 1, 3, 5 are respectfully urged to be patentably distinguishable over the arguable combination of Wilk in view of Bodick. Withdrawal of the rejection relative to independent claims 1, 3 and 5, as well as claims dependent therefrom, is requested.

For purposes of brevity, in view of the amendments to claims 1, 3 and 5, Applicants have not set forth specific arguments in traversal of the rejection of the dependent claims. The Examiner is referred to the arguments set forth in Applicants prior responses and appeal brief, which are hereby incorporated by reference. Applicants further reserve the right to present arguments in a subsequent response or on appeal.

With respect to the rejection of **claims 16 - 18 and 20 - 21** under 35 USC §103(a) as being unpatentable over Wilk in view of Bodick and further in view of Kehr, Applicants respectfully maintain that in setting forth the rejection and the basis allegedly found in the Kehr provisional applications, the Examiner failed to set forth a specific indication of where the alleged limitations are taught or even which of the Kehr provisional applications is now being relied upon to establish a date prior to that of the instant application. Notably, even though setting forth a new ground of rejection in the Examiner's Answer, neither Kehr Prov. A (60/200853) nor Kehr Prov. B (60/214688) have been made of record as the basis for the rejection. Absent establishing that the provisional applications teach what has been alleged in order to establish what the Examiner relies upon for the rejection.<sup>1</sup> Accordingly, Applicants continue to respectfully maintain that any such rejection is incomplete on its face (e.g., the rejection fails to specifically indicate which of the two provisional applications is relied upon as teaching the limitations), and does not permit Applicants to properly respond to such a rejection.

Considering, *in arguendo*, the reliance on Wilk in view of Bodick and further in view of Kehr, even if use of icons was known at the time of the invention, their use in the manner recited in the rejected claims is respectfully urged to be both unknown and non-obvious. Applicants continue to urge that no adequate basis has been set forth

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<sup>1</sup> the Examiner's review referred to at p. 19 of the Examiner's Answer of December 2008 does not place the documents on the record, nor does it substantiate that the provisional application(s) teach what is alleged.

for the combination of Wilk, Bodick and Kehr as Wilk would need no icons - because it is not a diagnostic aid, but an automated medical diagnostic system. Similarly, Bodick failed to suggest use of icons, and does not appear to teach or suggest the particular manner in which rejected claims 16 - 18 and 20 - 21 use such icons (e.g., symptoms represented as icons; icon indicates distribution of lesions on body; shape of medication, color). Absent some teaching or suggestion of the recited limitations, Applicants maintain the "Official Notice" was the result of a hindsight reconstruction of claim elements using the claims as the "recipe," and further filling in missing elements (not merely interpretations). Applicants continue to request that in the event the rejection is maintained the Examiner set forth document(s) that predate Applicants priority date that teach all of the recited limitations (including the sections thereof relied upon as the basis for a rejection, and indicate the motivation for such a combination as well as the specific teachings relied upon as the basis for the rejection.

*35 USC §101 Rejection Traversed*

Claims 1-24 and 28 are newly rejected under 35 USC §101 as being directed to non-statutory subject matter. Applicants respectfully traverse the rejection and have amended independent claims 1, 3 and 5 to address the rejection. Applicants respectfully urge that amended independent claims 1, 3 and 5 are both tied to another statutory class and transform underlying subject matter.

More specifically, claims 1 and 5 are directed to systems. Independent claims 1 and 5 have each been amended to further refer to a computer as the basis for the disclosed system. Thus claims 1 and 5 are tied to a statutory class. Furthermore, claims 1 and 5 each include further amendments to characterize the elements of such a system. For example, each claim now recites a knowledge database including findings-diagnosis links representing relationships between findings and diagnoses. The claims also include recitation of a diagnostic engine operating in the computer system, and its relationship to both the computer and the related elements. Finally, claims 1 and 5 each describe the manner in which the recited elements are employed to transform, in response to a user-input characteristic, the information stored in the image and knowledge databases into a subset of possible diagnoses and to present such diagnoses as images representative of the possible diagnoses on the user-interface. Hence, Applicants respectfully urge that amended

independent claims 1 and 5 meet the requirements of 35 USC §101 as they not only fall within a statutory category of patentable subject matter (machine or article of manufacture), but they transform information stored in the system (diagnoses) to information that is viewable by a user (subset of possible diagnoses) presented with images on the user-interface. As such the systems further provide a useful, concrete and tangible result that aids in or otherwise reduces diagnostic uncertainty.

Relative to independent method claim 3, this claim recites the transformation of information to a different state. More specifically, amended claim 3 creates an image database and a knowledge database having findings-diagnosis links representing relationships between findings and diagnoses. The information is cross-referenced and, in response to a user input (descriptive characteristics), a subset of possible diagnoses is identified and the information in the image database is transformed to concurrently present images related to the possible diagnoses for user review via a user-interface. Hence, the user's input is transformed to displayed images representing possible diagnoses. Accordingly, Applicants respectfully maintain that amended independent claim 3 thereby meets the requirements of 35 USC §101.

Insofar as claims 2, 4 and 6-24, inclusive, are concerned, these claims all depend from now presumably allowable amended claims 1, 3 or 5 and are also believed to meet the requirements of 35 USC §101 for the reasons hereinbefore discussed with regard to claims 1, 3 and 5. Withdrawal of the rejection non-statutory subject matter rejection is respectfully requested.

***Interview Request***

In view of the foregoing remarks and amendments, Applicants respectfully request that prosecution be reopened; reconsideration of this application and allowance thereof are earnestly solicited. Furthermore, in view of (a) the extended prosecution of this application, including significant USPTO delay in both moving this matter to appeal followed almost immediately by a requested remand from the Board, and (b) a new Examiner assigned to this application, Applicants respectfully request that the Examiner provide an opportunity for an interview prior to issuing a further rejection of the amended claims presented herein. This request has also been set forth in a concurrent, separately-filed letter requesting an interview.

In the event that additional fees are required as a result of this response, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicant's attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,

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